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1-42 Canceled

43. A method for relieving tension in an electrophoresis gel suspended by a gel clamp, said gel clamp having a first clamping jaw and a second clamping jaw, said method comprising the steps of:

gripping said electrophoresis gel with a gel handling assembly to apply sufficient force to suspend said gel in a vertical orientation,

opening said gel clamp for a time sufficient to relieve tension in said gel while gripping and suspending said gel by said gel handling assembly,

closing said gel clamp onto said gel, and

releasing said gel from said gel handling assembly.

44. The method of claim 43, wherein said gel handling assembly comprises a first movable operating arm having a gripping surface and an actuating surface, and a second movable operating arm opposing said first operating arm and having a gripping surface and an actuating surface, said method comprising moving said first operating arm with respect to said second operating arm, whereby said gripping surfaces contact said gel and grip said gel before said actuating surfaces contact said gel clamp and open said gel clamp.

45. The method of claim 44, wherein said first operating arm includes a rocker arm having a first end defining said gripping surface and a second end defining said actuating surface.

46. A method of processing an electrophoresis gel comprising the steps of:

suspending said gel by a gel clamp, said gel clamp having a first clamping jaw and a second clamping jaw, said gel being clamped between respective clamping surfaces of said first clamping jaw and said second clamping jaw;

contacting said gel with at least one treating liquid, gripping said gel with a gel handling assembly with sufficient force to suspend said gel in a vertical orientation,

opening said first and second clamping jaws of said gel clamp while suspending said gel by said gel handling assembly for sufficient time to relieve tension in said gel caused by shrinking or expansion of said gel,

closing said first and second clamping jaws of said gel clamp to grip said gel, and

releasing said gel from said gel handling assembly.

47. The method of claim 46, wherein said treating liquid is a staining reagent and said method further comprises staining said gel.

48. The method of claim 46, wherein said treating liquid is contained in a tank having a dimension to receive said gel in said vertical orientation.

49. The method of claim 48, comprising providing a support positioned above said tank and positioning said gel clamp on said support.

50. The method of claim 48, wherein said gel handling assembly is positioned above said tank.

51. The method of claim 50, wherein said gel handling assembly comprises a first movable operating arm and a second operating arm, said method comprising moving said first operating arm with respect to said second operating arm and gripping said gel.

52. The method of claim 51, wherein said first operating arm and said second operating arm are pivotally coupled to a first end member and to a second end member.

53. The method of claim 51, wherein said first operating arm includes a first end having a gripping surface for gripping said gel and a second end having an actuating surface for contacting said gel clamp, and said second operating arm includes a first end having a gripping surface and a second end having an actuating surface, said method comprising bringing said first and second operating arms into contact with said gel and said gel clamp.

54. The method of claim 53, wherein said first arm includes a rocker arm having a first end defining said gripping surface and a second end defining said actuating surface.

55. The method of claim 46, further comprising a robotic arm for coupling to said gel clamp, said method comprising supporting said gel and said gel clamp by said robotic arm in said gel handling assembly.